

400 Commercial Street, Suite 404 Portland, ME 04101 207.772.2891

April 7, 2021 Project 171.06108.008

Mr. Dan Pennessi Mason Station, LLC 485 West Putnam Avenue Greenwich, Connecticut 06830

RE: Revised Work Plan

Performance-Based Disposal of Polychlorinated Biphenyl Remediation Waste

Exterior Transformer Enclosures Mason Station Powerhouse Wiscasset, Maine

Dear Mr. Pennessi:

On behalf of Mason Station LLC, Ransom Consulting, LLC (Ransom) has prepared the following revised Work Plan to complete the Performance-Based Disposal of polychlorinated biphenyl (PCB) Remediation Waste associated with the Mason Station Powerhouse building, located on Birch Point Road in Wiscasset, Maine (the "Site"). This work plan is intended to present the general procedures to be followed during the cleanup of PCB-impacted soil and concrete (confirmed to meet the definition of PCB Remediation Waste) located within, and in the vicinity of, the two exterior electrical transformer enclosures associated with the Mason Station Powerhouse Building. The work plan was prepared in accordance with the performance-based disposal requirements outlined in 40 CFR §761.61(b).

This Work Plan was revised in response to comments provided to Ransom by Ms. Kimberly Tisa of the United States Environmental Protection Agency (U.S. EPA) in a March 17, 2020 email.

A Site Location Map and a Site Plan are provided as Figures 1 and 2, respectively.

#### **BACKGROUND**

In November 2018, Ransom conducted shallow soil sampling in the two exterior transformer enclosures north and southwest of the Mason Station Powerhouse Building as part of a Phase II Environmental Site Assessment (ESA) for the Site. Four surficial soil samples were collected from each of the two transformer enclosures: samples SS301 through SS304 (southwest transformer cage) and samples SS305 through SS308 (north transformer cage). The sampling locations are provided on Figure 2.

As shown in Table 1, PCBs were detected in all eight of the samples at total concentrations ranging from 8.76 to 84.4 milligrams per kilogram (mg/kg). The primary detected Aroclor was Aroclor 1260. A copy of the laboratory chemical analysis data report is provided as Attachment A.

As indicated in Table 1, the total PCB concentrations exceeded their corresponding Maine Department of Environmental Protection (MEDEP) Remedial Action Guidelines (RAGs) for the Commercial Worker and Residential exposure scenario (13 and 3.1 mg/kg, respectively).

PCB contamination associated with the exterior electrical transformer enclosures is anticipated to be the result of incidental spills or releases of PCB-containing transformer fluids to the ground surface and runoff from the electrical transformer pads during historic power plant operations. No obvious staining or discharges are known to have occurred. However, surficial spills or small releases have impacted surficial soil conditions near the former transformer pads and may have impacted porous concrete surfaces within the transformer enclosures as evidenced from historic sampling at the Site.

In June 2019, personnel from the U.S. EPA conducted a site visit to observe the on-site transformers and to review compliance with Section 6(e) of the TSCA regulations addressing PCB Remediation Waste (40 CFR §761.3). The U.S. EPA identified several non-compliance issues on-site which were summarized in a letter dated June 19, 2019 and requested that Mason Station, LLC provide a plan for proper disposal of PCB items, characterization of the nature and extent of contamination, and cleanup of PCB releases.

Between September and December 2020, known electrical transformers were removed from the Site and transported off-site for disposal. A report documenting the transformer removal and disposal was submitted to the U.S. EPA and the MEDEP on February 5, 2021. PCB-contaminated soil and potentially contaminated concrete remain in place in the areas of the exterior transformer enclosures and will require management as PCB Remediation Waste.

#### PROPOSED PERFORMANCE BASED DISPOSAL PLAN

## **Objective**

As required by 40 CFR §761.61(b), the objective of the proposed remediation is to remove PCB-contaminated soil and concrete from within the exterior transformer enclosures such that PCB concentrations in remaining soil and concrete are less than 1 mg/kg.

## **Pre-Excavation Soil Sampling**

Prior to initiating excavation of PCB-contaminated soils or removal of PCB-contaminated concrete, Ransom will characterize shallow soils around the exterior of fenced perimeters of both transformer enclosures. The sampling will be performed to confirm that PCB-contaminated soils are limited to the interiors of each transformer enclosure. Proposed sampling locations are provided on Figures 3 (southwest transformer cage) and 4 (north transformer cage). As shown on the figures, Ransom will collect 10 surface soil samples surrounding the southwest transformer cage (SS401 through SS110), and five surface soil samples surrounding the north transformer cage (SS411 through SS415). Surficial soil samples will be collected from the top 3 inches of soil at each location using hand tools. The samples will be placed into laboratory-prepared glassware and submitted to Alpha Analytical, Inc. (Alpha) of Westborough, Massachusetts for PCB analysis by U.S. EPA Method 8082A; the samples will be prepared using the Soxhlet extraction method (U.S. EPA Method 3540C). As a quality control measure, one blind duplicate soil sample will be collected for every 20 samples submitted for laboratory analysis (5%).

#### **Pre-Excavation Concrete Sampling**

Ransom will collect concrete samples from the various concrete pads located in each transformer enclosure. Proposed sampling locations are also provided on Figures 3 and 4. The bulk samples will be collected in accordance with the U.S. EPA), Region 1, *Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs) dated May 2011.* At each location, Ransom will collect samples from the following depth intervals:

- 1. 0 to  $\frac{1}{2}$  inch; and
- 2.  $\frac{1}{2}$  to 1 inch

The samples will be collected using a hammer drill with a 1.5-inch bit. Disposable stainless-steel spoons will be used to collect the concrete dust, and the drill bit will be decontaminated between sampling locations. The samples will be submitted to Alpha for PCB analysis by U.S. EPA Method 8082. The samples will be prepared for analysis using the standard Soxhlet extraction procedure (U.S. EPA Method 3540C). As a quality control measure, one blind duplicate soil sample will be collected for each 20 samples (5 percent).

### Remedial Plan

Soil

Based on the Phase II ESA soil sample analytical results from November 2018 and in lieu of performing additional site characterization sampling, Mason Station will excavate the top 1-foot of soil from within each of the electrical transformer enclosures. The proposed excavation limits are provided on Figures 3 and 4.

The soils will be live-loaded during excavation. The excavated soil will be managed as PCB Remediation Waste and will be shipped using Hazardous Waste Manifests to a chemical waste landfill licensed to accept PCB Remediation Waste in accordance with 40 CFR §761.61(b)(2). More specifically, soil removal will be completed by Environmental Projects, Inc. (EPI) of Auburn, Maine and will be transported for disposal by Goulet Transportation of Deerfield, Massachusetts. The soil will be transported to Chemical Waste Management (CWM) in Emelle, Alabama for disposal.

Standard silt fencing will be erected around the perimeter of the excavation area to prevent migration of PCB-containing soils from the excavation. In the northern transformer area, where much of the area surrounding the former transformer consists of asphalt pavement, hay bales will be used to prevent run-off and migration of contaminated soil.

Due to the relatively shallow nature of the proposed excavations, Ransom does not anticipate encountering or managing groundwater in the excavations. Although the southwest transformer cage is in the immediate vicinity of the natural spring that discharges inside of the Power House building, the spring discharge is at an elevation approximately 12 to 15 feet below the grade of the southwest transformer cage. The natural spring is not expected to be encountered or re-

engineered during the PCB remediation activities. Soils in the area of the exterior transformer cages consist of sand and gravel fill in which water is expected to readily infiltrate. With the exception of managing water generated during decontamination activities (discussed below), Ransom does not anticipate groundwater or stormwater management efforts will be necessary during the proposed PCB soil remediation.

It is recognized that numerous underground utilities are located throughout the areas of the exterior transformer cages. Previous efforts to identify individual utility conduits within the exterior transformer cages using a privately-contracted utility locator were not successful. All of the utilities in the areas of the exterior transformer cages are expected to be "dead" and no longer serviceable. It is anticipated that utilities may be encountered and removed as part of the PCB soil removal efforts.

#### Concrete

Pending receipt of analytical results for the concrete samples collected from the various concrete pads in the enclosures, Ransom will prepare an Addendum to this Work Plan. At present, Mason Station contemplates the following possible remedial actions to address PCB-contaminated concrete:

- 1. If PCB concentrations greater than 1 mg/kg are limited to the top ½ inch of concrete, the top ½ inch of concrete will be scarified and the removed concrete managed as PCB Remediation Waste.
- 2. If PCBs concentrations greater than 1 mg/kg extend beyond the top ½ inch of concrete, Mason Station will consider the following options:
  - a. Removal of the entire concrete pad for off-site disposal as PCB-Remediation Waste. This option may not be feasible since Ransom suspects that the concrete pads are quite deep, based on their former use; and/or
  - b. Encapsulation or installation of diamond plate on top of the affected concrete surface consistent with the continued use rule (40 CFR §761.30(p)) until such time as this portion of the Site is redeveloped.

As with the soil removal, the removal of PCB-contaminated concrete will be completed by EPI and will be transported for disposal by Goulet Transportation . The concrete will be transported to CWM in Emelle, Alabama for disposal.

## **Dust Suppression**

Throughout the cleanup, dust suppression will be utilized to reduce exposure to PCB-contaminated media by on-site workers. The following measures will minimize the exposure to airborne dust during the cleanup:

- 1. Access to the property is limited by a locked chain-link fence and access to the property will be limited to a gated entrance;
- 2. During work hours, exposed soil will be wetted regularly, or wetting agents will be applied, to prevent the generation of visible dust);
- 3. Soil piles generated during the cleanup will be covered daily with 10 mil polyethylene sheeting which will be secured in-place with concrete blocks or other like materials;
- 4. Truck and heavy equipment that enter the Site and drive on unpaved area will be subject to wheel cleaning prior to leaving the Site using wet methods; and
- 5. All soils, when transport on public roadways, will be covered to minimize fugitive dust and where necessary, truck tire and undercarriage washing will be employed to minimize dust generation and off-site tracking of soils.

To confirm that dust controls are effective, real-time dust monitoring will be performed during the cleanup using a hand-held logging laser-photometer-based aerosol monitor (i.e., TSI Dust Trak DRX Aerosol Monitor Model 8533 or equivalent).

PM10, an indicator of dust in the air that targets particulate matter with an aerodynamic diameter of less than or equal to 10 micrometers, will be measured in the field. The U.S. EPA indicates that to estimate inhalation exposure, only the inhalable fraction of suspended particulates (less than 10 microns in diameter) must be considered. The U.S. EPA's ambient air limit for PM10 is 150 micrograms per cubic meter ( $\mu g/m^3$ ) averaged over 24 hours; for this project, the action level is  $100~\mu g/m^3$  averaged over an 8-hour work shift. If the action level is exceeded, increased efforts to suppress dust emissions, including but not limited to engineering controls or increased use of watering will be made.

### Decontamination

### **Equipment**

Decontamination will be conducted to minimize employee and worker contact with PCBs or with equipment that has contacted PCBs, as well as to minimize off-site transport of contamination. Vehicles and equipment used will be decontaminated prior to leaving the Site. An equipment decontamination station will be constructed for decontaminating vehicles and equipment leaving the Site. The decontamination station will be a portable system constructed to capture decontamination water, including overspray, and will allow for collection and removal of the decontamination water. Vehicles, equipment, and materials will be cleaned and decontaminated prior to leaving the Site. Construction material will be handled in such a way as to minimize the potential for PCBs being spread and/or carried off site. Prior to exiting the Site, vehicles and equipment will be monitored to ensure the adequacy of decontamination.

Following excavation and scarification activities, the equipment (i.e., backhoe/excavator bucket, dump trucks, etc.) will be cleaned and decontaminated in accordance with §761.79(c)(2)(i). A copy of the decontamination method to be employed is provided at Attachment B.

## Worker

A decontamination enclosure for worker use will be provided. This area will allow workers to remove work clothing prior to leaving the Site to minimize the potential for contaminants being spread and/or carried off site.

Confirmatory Sampling

#### Soil

Following the soil removal activities, Ransom will collect confirmatory samples from the soil that is left in place within the excavated area. Confirmatory soil samples will be collected from a depth interval of 0 to 3-inches below the remaining grade after soil removal. Ransom anticipates collecting 12 confirmatory soil samples (CS501 through CS512) from within the southwest transformer enclosure and 4 confirmatory soil samples (CS513 through CS516) from the soils left in place within the northern enclosure. Duplicate samples will be collected at a rate of 5% for quality assurance purposes. Proposed confirmatory soil sampling locations are provided on Figures 5 and 6.

The soil samples will be submitted to Alpha for PCBs analysis. The analyses will be expedited and analytical results will be available within 48 hours following laboratory receipt in order to obtain results and make decisions before the excavation contractor demobilizes from the Site. In the event that laboratory analysis indicates PCBs remain in certain areas at concentrations in excess of 1 mg/kg, additional soil excavation and confirmatory soil sampling will be performed in those areas until results indicate PCB concentrations less than 1 mg/kg using the same methods as described above.

#### Concrete

Depending on the findings of the pre-excavation concrete sampling described earlier and the degree to which PCB-contaminated concrete is remediated (scarification of the top ½ inch of concrete or full concrete pad removal) or managed in-placed, post-remediation sampling of concrete will be limited to those concrete pads at which scarification was completed. At these pads, a sample of the remaining top ½ inch of concrete will be collected from up to 4 locations for confirmatory PCB analysis. Duplicate samples of remaining concrete will be collected at a rate of 5% for quality assurance purposes. Consistent with the prior concrete sample analyses, the samples will be submitted to Alpha for PCB analysis by U.S. EPA Method 8082. The samples will be prepared for analysis using the standard Soxhlet extraction procedure (U.S. EPA Method 3540C).

#### Data Usability/Validation

To assess the usability/validity of the post-cleanup soil sampling data, a limited data validation assessment using the document *Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses* as a general guideline will be completed. The data validation will be conducted so that the analytical data generated during the cleanup is of defensible analytical quality. The Data Quality Objective (DQO) of the work conducted under this Plan is to obtain analytical data sufficient to ensure that the cleanup was effective.

For each set of laboratory data generated during the cleanup, the equivalent of the components of a Tier I and Tier II Data Validation (DV) will be conducted. In general, these DVs will consist of the following:

- 1. *Tier I:* Completeness and documentation review. Information provided by the laboratory for sample integrity (e.g., sample temperature, preservation, holding time, etc.) will be reviewed to ensure that the proper chain-of-custody procedures were followed, and check the laboratory report for necessary components; and
- 2. Tier II: Sample results and QC review. This will include a review of Data Quality Indicators (DQIs) for accuracy, precision, and sensitivity. Specifically, the quality assurance/quality control (QA/QC) measures used by the laboratory to be reviewed will include surrogate recoveries, method blank results, laboratory control sample (LCS) results, and matrix spike (MS)/matrix spike duplicate (MSD) results.

The results of the DV will be attached to the laboratory chemical analysis data reports.

#### REPORTING

After the completion of the cleanup and post-cleanup sampling, a report will be prepared summarizing the cleanup activities. This document will include the following elements:

- 1. A summary of site conditions prior to the cleanup (consistent with the content of this Plan);
- 2. A summary of the cleanup procedures employed at the Site, along with photo-documentation of site conditions before, during and after the cleanup;
- 3. A summary of the procedures used to collect post-cleanup samples including tables and drawings summarizing PCB concentrations in the soil and concrete (if appliable) samples;
- 4. Copies of waste disposal documents; and
- 5. Copies of laboratory chemical analysis data reports.

### PROPOSED IMPLEMENTATION SCHEDULE

A proposed implementation schedule for the Plan is as follows:

ActivityCompletion DateSubmittal of Plan to U.S. EPAApril 2021U.S. EPA Approval (expected)May 2021Cleanup CompletedJuly/August 2021Summary Report to U.S. EPANovember 2021

If you have any questions regarding this Work Plan, please feel free to call us at your convenience.

Sincerely,

RANSOM CONSULTING, LLC

Eriksen P. Phenix, L.G.

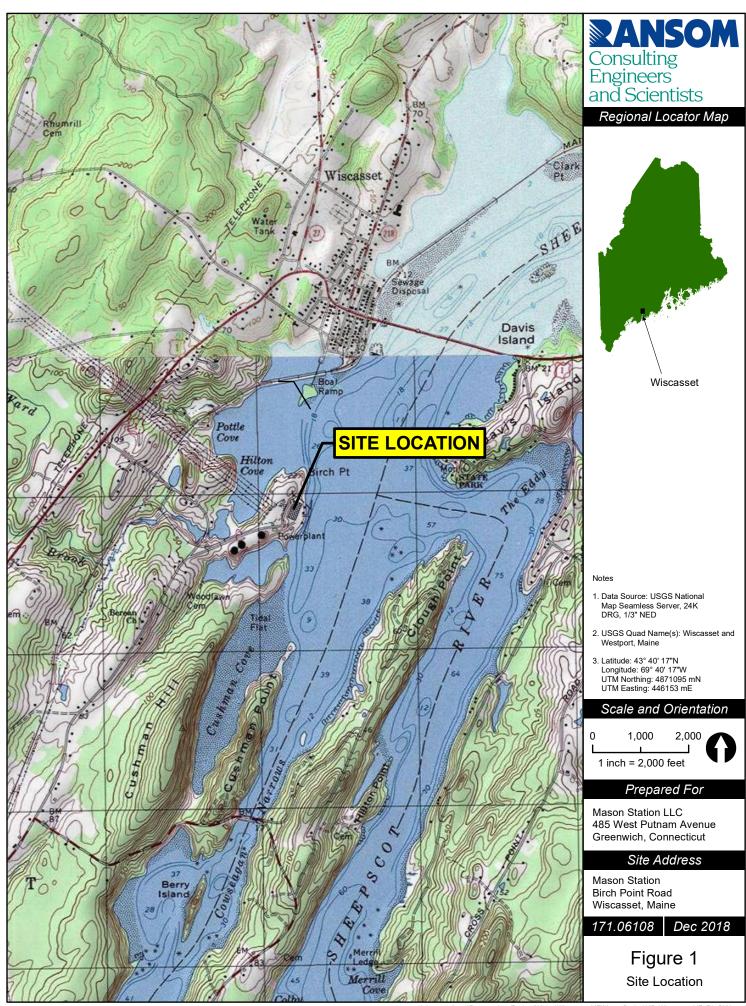
Project Geologist

Stephen J. Dyer, P.E. Senior Project Manager

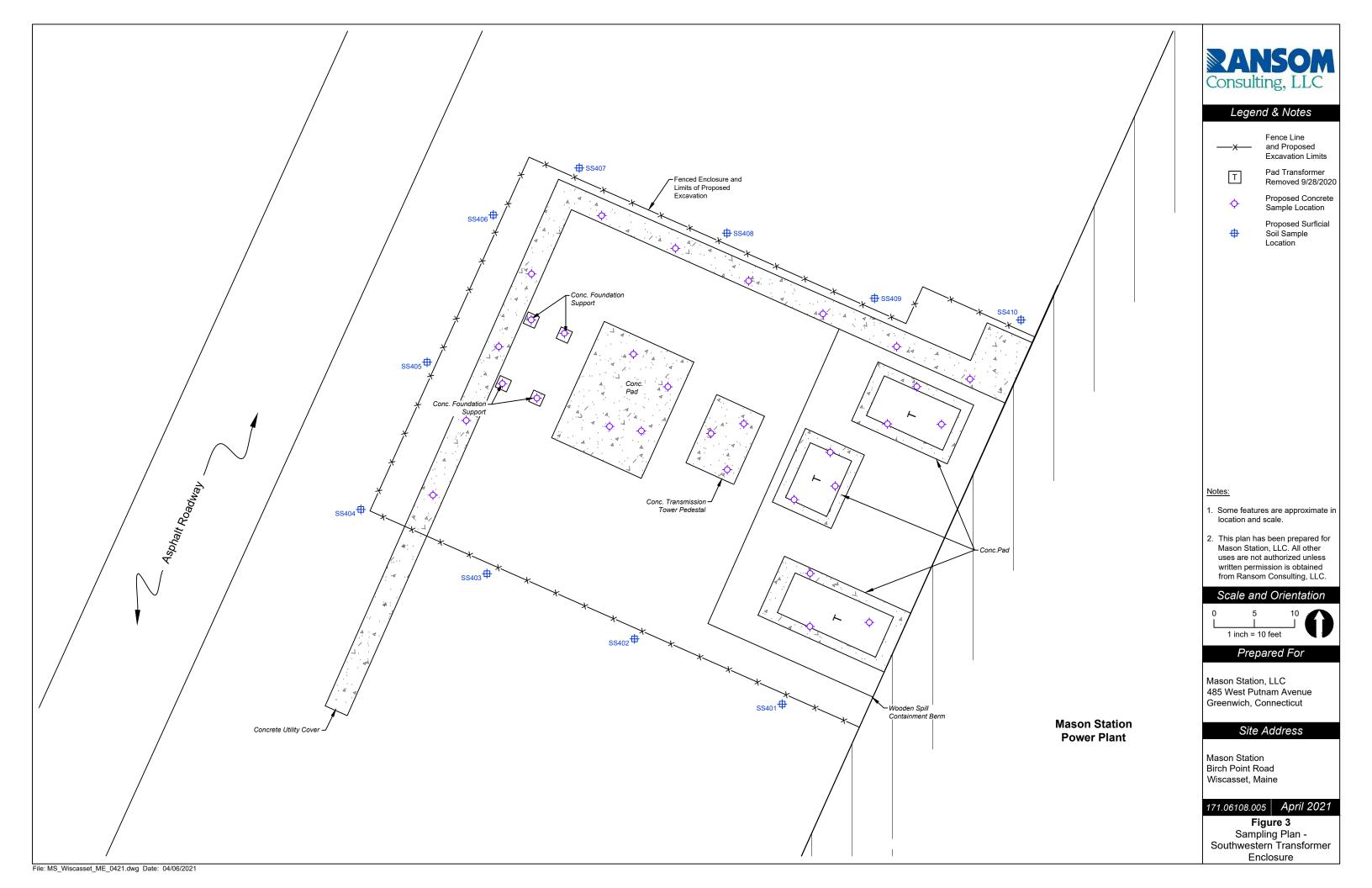
Timothy J. Snay, LSP

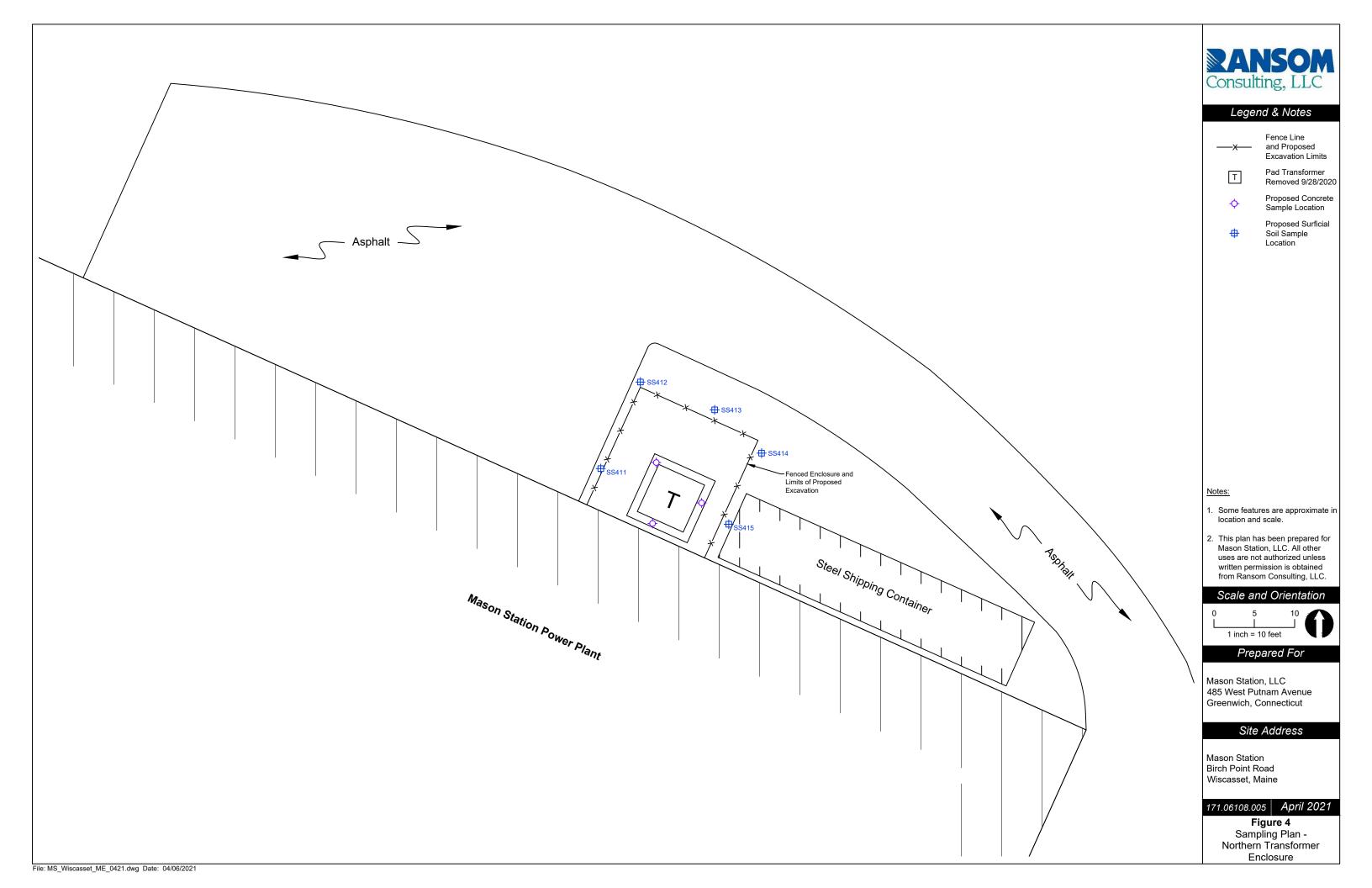
Vice President/Senior Project Manager

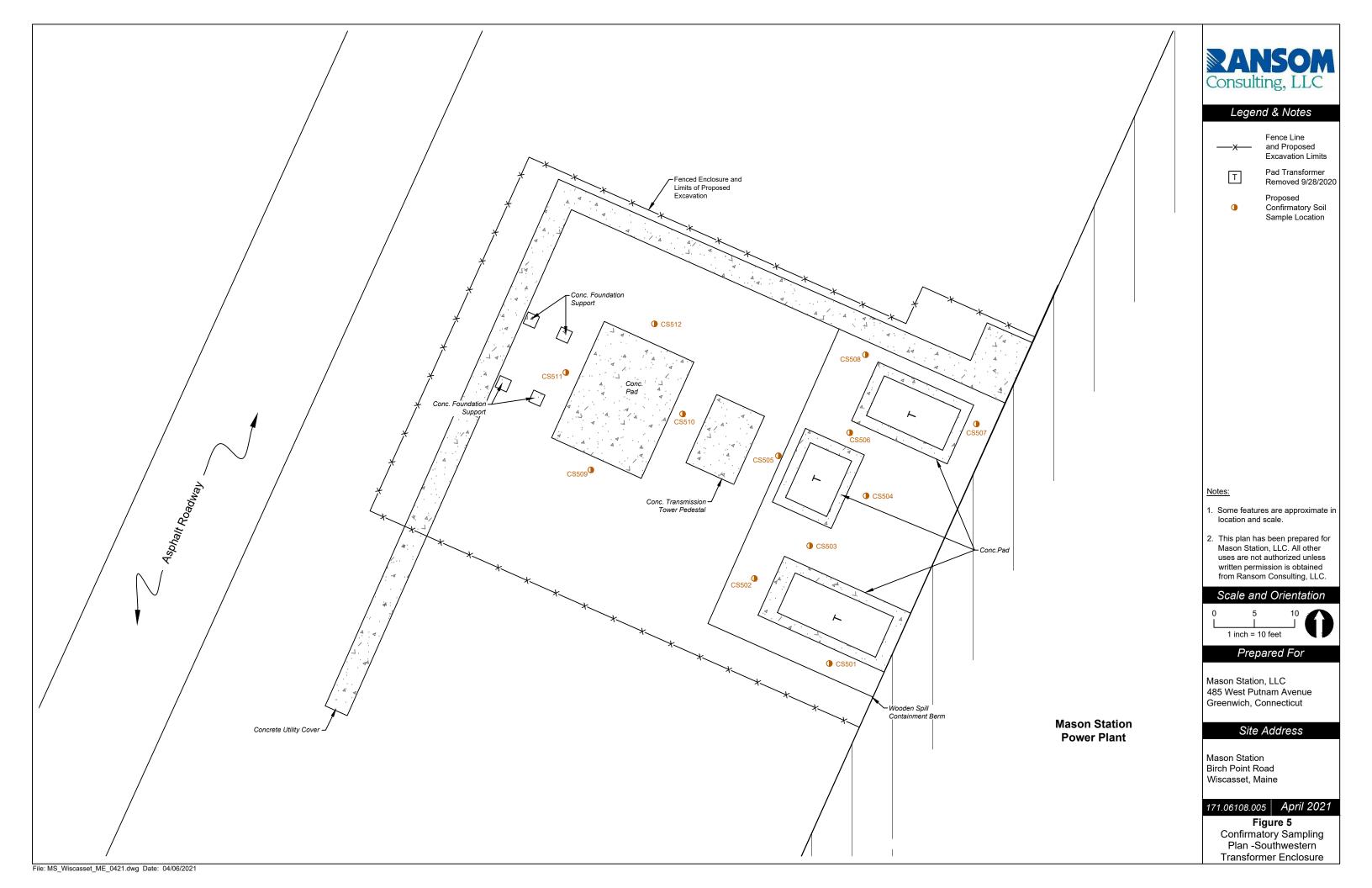
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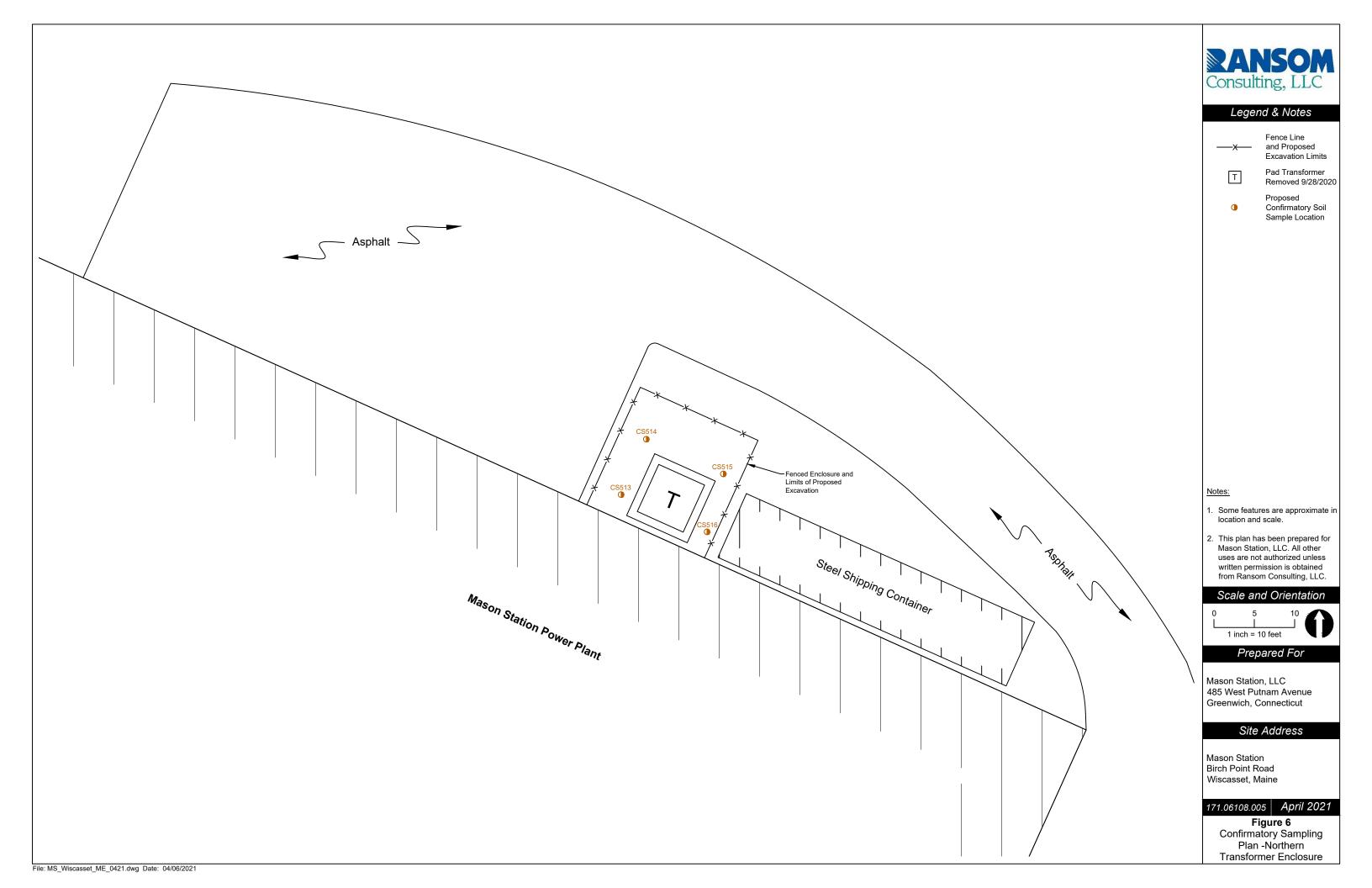












## ATTACHMENT A

Previous Laboratory Analytical Report

Revised Work Plan
Performance-Based Disposal of Polychlorinated Biphenyl Remediation Waste
Exterior Transformer Enclosures
Mason Station Powerhouse
Wiscasset, Maine



#### ANALYTICAL REPORT

Lab Number: L1845807

Client: Ransom Consulting, Inc.

400 Commercial Street

Suite 404

Portland, ME 04101-4660

ATTN: Steve Dyer Phone: (207) 772-2891

Project Name: MASON STATION

Project Number: 171.06108

Report Date: 11/16/18

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: MASON STATION

Project Number: 171.06108

**Lab Number:** L1845807 **Report Date:** 11/16/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1845807-01	SS301	SOIL	WISCASSET, ME	11/05/18 11:25	11/08/18
L1845807-02	SS302	SOIL	WISCASSET, ME	11/05/18 11:30	11/08/18
L1845807-03	SS303	SOIL	WISCASSET, ME	11/05/18 11:35	11/08/18
L1845807-04	SS304	SOIL	WISCASSET, ME	11/05/18 11:40	11/08/18
L1845807-05	SS305	SOIL	WISCASSET, ME	11/05/18 12:45	11/08/18
L1845807-06	SS306	SOIL	WISCASSET, ME	11/05/18 12:50	11/08/18
L1845807-07	SS307	SOIL	WISCASSET, ME	11/05/18 12:55	11/08/18
L1845807-08	SS308	SOIL	WISCASSET, ME	11/05/18 13:00	11/08/18
L1845807-09	EQUIPMENT BLANK	WATER	WISCASSET, ME	11/05/18 12:30	11/08/18



Project Name: MASON STATION Lab Number: L1845807

#### **Case Narrative**

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

#### **HOLD POLICY**

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please	contact	Client	Services	at 80	0-624	-9220	with	any	question	ıs.



Project Name: MASON STATION Lab Number: L1845807

**Project Number:** 171.06108 **Report Date:** 11/16/18

## **Case Narrative (continued)**

#### **PCBs**

L1845807-01 through -08: The surrogate recoveries are below the acceptance criteria for 2,4,5,6-tetrachlorom-xylene (0%) and decachlorobiphenyl (0%) due to the dilution required to quantitate the sample. Reextraction was not required; therefore, the results of the original analysis are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Amita Naik

Authorized Signature:

Title: Technical Director/Representative Date: 11/16/18

Nails

## **ORGANICS**



## **PCBS**



**Project Name:** Lab Number: MASON STATION L1845807

Report Date: **Project Number:** 171.06108 11/16/18

**SAMPLE RESULTS** 

Lab ID: D Date Collected: 11/05/18 11:25 L1845807-01

Date Received: Client ID: SS301 11/08/18

Sample Location: WISCASSET, ME Field Prep: Not Specified

Sample Depth:

Extraction Method: EPA 3540C Matrix: Soil **Extraction Date:** 11/10/18 14:55 Analytical Method: 1,8082A Cleanup Method: EPA 3665A

Analytical Date: 11/16/18 12:28 Cleanup Date: 11/11/18 Analyst: ΚB Cleanup Method: EPA 3660B 86% Percent Solids: Cleanup Date: 11/11/18

Parameter	Result	Qualifier	Units	RL	MDL	<b>Dilution Factor</b>	Column		
Polychlorinated Biphenyls by GC - Westborough Lab									
Aroclor 1016	ND		ug/kg	1870		50	Α		
Aroclor 1221	ND		ug/kg	1870		50	Α		
Aroclor 1232	ND		ug/kg	1870		50	Α		
Aroclor 1242	ND		ug/kg	1870		50	Α		
Aroclor 1248	ND		ug/kg	1870		50	Α		
Aroclor 1254	ND		ug/kg	1870		50	Α		
Aroclor 1260	32400		ug/kg	1870		50	В		
Aroclor 1262	ND		ug/kg	1870		50	Α		
Aroclor 1268	ND		ug/kg	1870		50	Α		
PCBs, Total	32400		ug/kg	1870		50	В		

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	В
Decachlorobiphenyl	0	Q	30-150	В
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	Α
Decachlorobiphenyl	0	Q	30-150	Α



Project Name: MASON STATION Lab Number: L1845807

**Project Number:** 171.06108 **Report Date:** 11/16/18

**SAMPLE RESULTS** 

Lab ID: L1845807-02 D Date Collected: 11/05/18 11:30

Client ID: SS302 Date Received: 11/08/18
Sample Location: WISCASSET, ME Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3540C
Analytical Method: 1,8082A Extraction Date: 11/10/18 14:55
Analytical Date: 11/16/18 12:41 Cleanup Method: EPA 3665A

Analytical Date: 11/16/18 12:41 Cleanup Method: EPA 3665A
Analyst: KB Cleanup Date: 11/11/18
Percent Solids: 81% Cleanup Method: EPA 3660B
Cleanup Date: 11/11/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column			
Polychlorinated Biphenyls by GC - Westborough Lab										
Aroclor 1016	ND		ug/kg	3930		100	Α			
Aroclor 1221	ND		ug/kg	3930		100	Α			
Aroclor 1232	ND		ug/kg	3930		100	Α			
Aroclor 1242	ND		ug/kg	3930		100	Α			
Aroclor 1248	ND		ug/kg	3930		100	А			
Aroclor 1254	16400		ug/kg	3930		100	В			
Aroclor 1260	ND		ug/kg	3930		100	А			
Aroclor 1262	ND		ug/kg	3930		100	А			
Aroclor 1268	ND		ug/kg	3930		100	А			
PCBs, Total	16400		ua/ka	3930		100	В			

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	В
Decachlorobiphenyl	0	Q	30-150	В
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	Α
Decachlorobiphenyl	0	Q	30-150	Α



11/11/18

Cleanup Date:

**Project Name:** Lab Number: MASON STATION L1845807

Report Date: **Project Number:** 171.06108 11/16/18

**SAMPLE RESULTS** 

Lab ID: D Date Collected: 11/05/18 11:35 L1845807-03

Date Received: Client ID: SS303 11/08/18

Sample Location: Field Prep: WISCASSET, ME Not Specified

Sample Depth:

Extraction Method: EPA 3540C Matrix: Soil **Extraction Date:** 11/10/18 14:55 Analytical Method: 1,8082A Cleanup Method: EPA 3665A

Analytical Date: 11/16/18 15:49 Cleanup Date: 11/11/18 Analyst: **AWS** Cleanup Method: EPA 3660B 72% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	<b>Dilution Factor</b>	Column		
Polychlorinated Biphenyls by GC - Westborough Lab									
Arador 1016	ND			0110		200	۸		
Aroclor 1016	ND		ug/kg	9110		200	Α		
Aroclor 1221	ND		ug/kg	9110		200	Α		
Aroclor 1232	ND		ug/kg	9110		200	Α		
Aroclor 1242	ND		ug/kg	9110		200	Α		
Aroclor 1248	ND		ug/kg	9110		200	Α		
Aroclor 1254	ND		ug/kg	9110		200	Α		
Aroclor 1260	84400		ug/kg	9110		200	В		
Aroclor 1262	ND		ug/kg	9110		200	Α		
Aroclor 1268	ND		ug/kg	9110		200	Α		
PCBs, Total	84400		ug/kg	9110		200	В		

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	В
Decachlorobiphenyl	0	Q	30-150	В
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	Α
Decachlorobiphenyl	0	Q	30-150	Α



**Project Name:** MASON STATION **Lab Number:** L1845807

**Project Number:** 171.06108 **Report Date:** 11/16/18

**SAMPLE RESULTS** 

Lab ID: L1845807-04 D Date Collected: 11/05/18 11:40

Client ID: SS304 Date Received: 11/08/18

Sample Location: WISCASSET, ME Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3540C
Analytical Method: 1,8082A Extraction Date: 11/10/18 14:55
Analytical Date: 11/16/18 16:02 Cleanup Method: EPA 3665A

Analytical Date: 11/16/18 16:02 Cleanup Method: EPA 3665A
Analyst: AWS Cleanup Date: 11/11/18
Percent Solids: 91% Cleanup Method: EPA 3660B

Cleanup Date: 11/11/18

Parameter	Result	Qualifier	Units	RL	MDL	<b>Dilution Factor</b>	Column
Polychlorinated Biphenyls by	GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	3580		100	Α
Aroclor 1221	ND		ug/kg	3580		100	Α
Aroclor 1232	ND		ug/kg	3580		100	Α
Aroclor 1242	ND		ug/kg	3580		100	Α
Aroclor 1248	ND		ug/kg	3580		100	Α
Aroclor 1254	ND		ug/kg	3580		100	Α
Aroclor 1260	ND		ug/kg	3580		100	Α
Aroclor 1262	ND		ug/kg	3580		100	Α
Aroclor 1268	18100		ug/kg	3580		100	В
PCBs, Total	18100		ug/kg	3580		100	В

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	В
Decachlorobiphenyl	0	Q	30-150	В
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	Α
Decachlorobiphenyl	0	Q	30-150	Α



Extraction Method: EPA 3540C

Project Name: MASON STATION Lab Number: L1845807

**Project Number:** 171.06108 **Report Date:** 11/16/18

**SAMPLE RESULTS** 

Lab ID: L1845807-05 D Date Collected: 11/05/18 12:45

Client ID: SS305 Date Received: 11/08/18 Sample Location: WISCASSET, ME Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8082A Extraction Date: 11/10/18 14:55
Analytical Date: 11/16/18 13:23 Cleanup Method: EPA 3665A

Analyst: KB Cleanup Date: 11/11/18
Percent Solids: 73% Cleanup Method: EPA 3660B
Cleanup Date: 11/11/18

Qualifier RL MDL Result Units **Dilution Factor** Column **Parameter** Polychlorinated Biphenyls by GC - Westborough Lab Aroclor 1016 ND ug/kg 899 --20 Α Aroclor 1221 ND ug/kg 899 20 Α Aroclor 1232 ND ug/kg 899 --20 Α ND Aroclor 1242 ug/kg 899 20 Α Aroclor 1248 ND ug/kg 899 20 Α ND 20 Aroclor 1254 ug/kg 899 Α Aroclor 1260 8760 899 20 В ug/kg --Aroclor 1262 ND 899 20 Α ug/kg ND Aroclor 1268 20 ug/kg 899 --Α

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	В
Decachlorobiphenyl	0	Q	30-150	В
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	Α
Decachlorobiphenyl	0	Q	30-150	Α

8760



20

899

ug/kg

--

В

PCBs, Total

Project Name: MASON STATION Lab Number: L1845807

**Project Number:** 171.06108 **Report Date:** 11/16/18

**SAMPLE RESULTS** 

Lab ID: L1845807-06 D Date Collected: 11/05/18 12:50

Client ID: SS306 Date Received: 11/08/18 Sample Location: WISCASSET, ME Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3540C
Analytical Method: 1,8082A Extraction Date: 11/10/18 14:55

Analytical Date: 11/16/18 13:36 Cleanup Method: EPA 3665A Analyst: KB Cleanup Date: 11/11/18

Percent Solids: 67% Cleanup Method: EPA 3660B Cleanup Date: 11/11/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column			
Polychlorinated Biphenyls by GC - Westborough Lab										
Aroclor 1016	ND		ug/kg	975		20	Α			
Aroclor 1221	ND		ug/kg	975		20	Α			
Aroclor 1232	ND		ug/kg	975		20	Α			
Aroclor 1242	ND		ug/kg	975		20	Α			
Aroclor 1248	ND		ug/kg	975		20	Α			
Aroclor 1254	ND		ug/kg	975		20	Α			
Aroclor 1260	9140		ug/kg	975		20	В			
Aroclor 1262	ND		ug/kg	975		20	Α			
Aroclor 1268	ND		ug/kg	975		20	Α			
PCBs, Total	9140		ua/ka	975		20	В			

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	В
Decachlorobiphenyl	0	Q	30-150	В
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	Α
Decachlorobiphenyl	0	Q	30-150	Α



Project Name: MASON STATION Lab Number: L1845807

**Project Number:** 171.06108 **Report Date:** 11/16/18

**SAMPLE RESULTS** 

Lab ID: L1845807-07 D Date Collected: 11/05/18 12:55

Client ID: SS307 Date Received: 11/08/18
Sample Location: WISCASSET, ME Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3540C
Analytical Method: 1,8082A Extraction Date: 11/10/18 14:55
Analytical Date: 11/16/18 13:49 Cleanup Method: EPA 3665A

Analytical Date: 11/16/18 13:49 Cleanup Method: EPA 3665A
Analyst: KB Cleanup Date: 11/11/18
Percent Solids: 60% Cleanup Method: EPA 3660B
Cleanup Date: 11/11/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - V	Vestborough Lab						
Aroclor 1016	ND		ug/kg	2640		50	Α
Aroclor 1221	ND		ug/kg	2640		50	Α
Aroclor 1232	ND		ug/kg	2640		50	Α
Aroclor 1242	ND		ug/kg	2640		50	Α
Aroclor 1248	ND		ug/kg	2640		50	Α
Aroclor 1254	ND		ug/kg	2640		50	Α
Aroclor 1260	20600		ug/kg	2640		50	В
Aroclor 1262	ND		ug/kg	2640		50	Α
Aroclor 1268	ND		ug/kg	2640		50	Α
PCBs, Total	20600		ug/kg	2640		50	В

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	В
Decachlorobiphenyl	0	Q	30-150	В
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	Α
Decachlorobiphenyl	0	Q	30-150	Α



**Project Name:** MASON STATION **Lab Number:** L1845807

**Project Number:** 171.06108 **Report Date:** 11/16/18

**SAMPLE RESULTS** 

Lab ID: L1845807-08 D Date Collected: 11/05/18 13:00

Client ID: SS308 Date Received: 11/08/18
Sample Location: WISCASSET, ME Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3540C
Analytical Method: 1,8082A Extraction Date: 11/10/18 14:55
Analytical Date: 11/16/18 14:02 Cleanup Method: EPA 3665A

Analytical Date: 11/16/18 14:02 Cleanup Method: EPA 3665A
Analyst: KB
Cleanup Date: 11/11/18
Percent Solids: 71% Cleanup Method: EPA 3660B
Cleanup Date: 11/11/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC	C - Westborough Lab						
Aroclor 1016	ND		ug/kg	2300		50	Α
Aroclor 1221	ND		ug/kg	2300		50	Α
Aroclor 1232	ND		ug/kg	2300		50	Α
Aroclor 1242	ND		ug/kg	2300		50	Α
Aroclor 1248	ND		ug/kg	2300		50	Α
Aroclor 1254	ND		ug/kg	2300		50	Α
Aroclor 1260	25600		ug/kg	2300		50	В
Aroclor 1262	ND		ug/kg	2300		50	Α
Aroclor 1268	ND		ug/kg	2300		50	Α
PCBs, Total	25600		ug/kg	2300		50	В

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
	,,, necessary	<b></b>	Orneria	
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	В
Decachlorobiphenyl	0	Q	30-150	В
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	Α
Decachlorobiphenyl	0	Q	30-150	Α



**Project Name:** MASON STATION **Lab Number:** L1845807

**Project Number:** 171.06108 **Report Date:** 11/16/18

**SAMPLE RESULTS** 

Lab ID: L1845807-09 Date Collected: 11/05/18 12:30

Client ID: EQUIPMENT BLANK Date Received: 11/08/18
Sample Location: WISCASSET, ME Field Prep: Not Specified

Sample Depth:

Matrix: Water Extraction Method: EPA 3510C

Analytical Method: 1,8082A Extraction Date: 11/10/18 13:42

Cleanup Method: EPA 3665A

Analytical Date: 11/14/18 18:53 Cleanup Method: EPA 3665A Analyst: JW Cleanup Date: 11/11/18

Cleanup Method: EPA 3660B Cleanup Date: 11/11/18

Parameter	Result	Qualifier	Units	RL	MDL	<b>Dilution Factor</b>	Column
Polychlorinated Biphenyls by GC - Wes	tborough Lab						
Annalay 4040	ND		//	0.050		4	۸
Aroclor 1016	ND		ug/l	0.250		1	Α
Aroclor 1221	ND		ug/l	0.250		1	Α
Aroclor 1232	ND		ug/l	0.250		1	Α
Aroclor 1242	ND		ug/l	0.250		1	Α
Aroclor 1248	ND		ug/l	0.250		1	Α
Aroclor 1254	ND		ug/l	0.250		1	Α
Aroclor 1260	ND		ug/l	0.250		1	Α
Aroclor 1262	ND		ug/l	0.250		1	Α
Aroclor 1268	ND		ug/l	0.250		1	Α
PCBs, Total	ND		ug/l	0.250		1	Α

			Acceptance	
Surrogate	% Recovery	Qualifier	Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	В
Decachlorobiphenyl	72		30-150	В
2,4,5,6-Tetrachloro-m-xylene	68		30-150	Α
Decachlorobiphenyl	63		30-150	Α



L1845807

**Project Name:** MASON STATION

**Project Number:** 171.06108 Report Date: 11/16/18

Lab Number:

**Method Blank Analysis Batch Quality Control** 

Analytical Method:

1,8082A

Analytical Date: 11/14/18 19:05

Analyst: JW

Extraction Method: EPA 3510C Extraction Date: 11/10/18 13:42 Cleanup Method: EPA 3665A Cleanup Date: 11/11/18 Cleanup Method: EPA 3660B Cleanup Date: 11/11/18

Parameter	Result	Qualifier	Units		RL	MDL	Column
Polychlorinated Biphenyls by GC - V	Westborough	Lab for s	ample(s):	09	Batch:	WG1178172-	-1
Aroclor 1016	ND		ug/l	0.	.250		А
Aroclor 1221	ND		ug/l	0	.250		Α
Aroclor 1232	ND		ug/l	0	.250		Α
Aroclor 1242	ND		ug/l	0	.250		Α
Aroclor 1248	ND		ug/l	0	.250		Α
Aroclor 1254	ND		ug/l	0	.250		Α
Aroclor 1260	ND		ug/l	0	.250		Α
Aroclor 1262	ND		ug/l	0	.250		Α
Aroclor 1268	ND		ug/l	0	.250		Α
PCBs, Total	ND		ug/l	0	.250		Α

		P	Acceptanc	e
Surrogate	%Recovery G	Qualifier	Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	В
Decachlorobiphenyl	67		30-150	В
2,4,5,6-Tetrachloro-m-xylene	67		30-150	Α
Decachlorobiphenyl	58		30-150	Α



L1845807

Lab Number:

Project Name: MASON STATION

**Project Number:** 171.06108 **Report Date:** 11/16/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A Analytical Date: 1,8082A 11/15/18 03:55

Analyst: KB

Extraction Method: EPA 3540C
Extraction Date: 11/10/18 14:55
Cleanup Method: EPA 3665A
Cleanup Date: 11/11/18
Cleanup Method: EPA 3660B
Cleanup Date: 11/11/18

Parameter	Result	Qualifier	Units	RL		MDL	Column
Polychlorinated Biphenyls by GC -	Westboroug	h Lab for s	sample(s):	01-08	Batch:	WG11	78187-1
Aroclor 1016	ND		ug/kg	31.3			А
Aroclor 1221	ND		ug/kg	31.3			Α
Aroclor 1232	ND		ug/kg	31.3			Α
Aroclor 1242	ND		ug/kg	31.3			Α
Aroclor 1248	ND		ug/kg	31.3			Α
Aroclor 1254	ND		ug/kg	31.3			Α
Aroclor 1260	ND		ug/kg	31.3			Α
Aroclor 1262	ND		ug/kg	31.3			Α
Aroclor 1268	ND		ug/kg	31.3			Α
PCBs, Total	ND		ug/kg	31.3			Α

		Acceptance	e
Surrogate	%Recovery Qualifie	r Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	101	30-150	В
Decachlorobiphenyl	104	30-150	В
2,4,5,6-Tetrachloro-m-xylene	92	30-150	Α
Decachlorobiphenyl	92	30-150	Α



L1845807

## Lab Control Sample Analysis Batch Quality Control

Project Name: MASON STATION

Project Number: 171.06108

Lab Number:

**Report Date:** 11/16/18

	LCS		LCSD		%Recovery			RPD	
Parameter	%Recovery	Qual	%Recove	ery Qual	Limits	RPD	Qual	Limits	Column
Polychlorinated Biphenyls by GC - Westbord	ough Lab Associ	ated sample(s)	: 09 Bat	ch: WG1178172	-2 WG1178172-3	3			
Aroclor 1016	74		75		40-140	2		50	Α
Aroclor 1260	63		64		40-140	2		50	Α

Surrogate	LCS %Recovery Qu	LCSD ual %Recovery Qual	Acceptance Criteria Column
2,4,5,6-Tetrachloro-m-xylene	70	69	30-150 B
Decachlorobiphenyl	58	55	30-150 B
2,4,5,6-Tetrachloro-m-xylene	65	67	30-150 A
Decachlorobiphenyl	50	49	30-150 A

## Lab Control Sample Analysis Batch Quality Control

**Project Name:** MASON STATION

Lab Number:

L1845807

**Project Number:** 171.06108

Report Date: 11/16/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westbo	rough Lab Associa	ited sample(s)	: 01-08 Batch:	WG1178	187-2 WG11781	87-3			
Aroclor 1016	90		89		40-140	1		50	А
Aroclor 1260	76		78		40-140	3		50	Α

	LCS	LCSD	Acceptance
Surrogate	%Recovery Qu	ual %Recovery Qual	Criteria Column
2,4,5,6-Tetrachloro-m-xylene	96	99	30-150 B
Decachlorobiphenyl	102	105	30-150 B
2,4,5,6-Tetrachloro-m-xylene	90	92	30-150 A
Decachlorobiphenyl	88	88	30-150 A



# INORGANICS & MISCELLANEOUS



Project Name: MASON STATION Lab Number: L1845807

**Project Number:** 171.06108 **Report Date:** 11/16/18

**SAMPLE RESULTS** 

Lab ID: L1845807-01 Date Collected: 11/05/18 11:25

Client ID: SS301 Date Received: 11/08/18

Sample Location: WISCASSET, ME Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.1		%	0.100	NA	1	-	11/10/18 10:39	121,2540G	RI



**Project Name:** Lab Number: MASON STATION

L1845807 Report Date: **Project Number:** 11/16/18 171.06108

**SAMPLE RESULTS** 

Lab ID: Date Collected: L1845807-02 11/05/18 11:30

Client ID: SS302 Date Received: 11/08/18

Not Specified Sample Location: WISCASSET, ME Field Prep:

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - V	Westborough Lab									
Solids, Total	80.8		%	0.100	NA	1	-	11/10/18 10:39	121,2540G	RI



Project Name: MASON STATION Lab Number: L1845807

**Project Number:** 171.06108 **Report Date:** 11/16/18

**SAMPLE RESULTS** 

Lab ID: L1845807-03 Date Collected: 11/05/18 11:35

Client ID: SS303 Date Received: 11/08/18
Sample Location: WISCASSET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab	)								
Solids, Total	71.8		%	0.100	NA	1	-	11/10/18 10:39	121,2540G	RI



**Project Name:** Lab Number: MASON STATION

L1845807 Report Date: **Project Number:** 11/16/18 171.06108

**SAMPLE RESULTS** 

Lab ID: Date Collected: L1845807-04 11/05/18 11:40

Client ID: SS304 Date Received: 11/08/18

Not Specified Sample Location: WISCASSET, ME Field Prep:

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab	)								
Solids, Total	90.7		%	0.100	NA	1	-	11/10/18 10:39	121,2540G	RI



**Project Name:** Lab Number: MASON STATION

L1845807 Report Date: **Project Number:** 11/16/18 171.06108

**SAMPLE RESULTS** 

Lab ID: Date Collected: L1845807-05 11/05/18 12:45

11/08/18 Client ID: SS305 Date Received:

Not Specified Sample Location: WISCASSET, ME Field Prep:

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - V	Westborough Lab									
Solids, Total	72.5		%	0.100	NA	1	-	11/10/18 10:39	121,2540G	RI



L1845807

**Project Name:** MASON STATION

**Project Number:** 171.06108

Report Date: 11/16/18

Lab Number:

**SAMPLE RESULTS** 

Lab ID: L1845807-06

Client ID: SS306

Sample Location: WISCASSET, ME

Date Collected: 11/05/18 12:50 Date Received: 11/08/18

Not Specified Field Prep:

Sample Depth:

Parameter	Result (	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - \	Westborough Lab									
Solids, Total	66.7		%	0.100	NA	1	-	11/10/18 10:39	121,2540G	RI



11/05/18 12:55

Lab Number:

Date Collected:

**Project Name:** MASON STATION

L1845807 Report Date: **Project Number:** 11/16/18 171.06108

**SAMPLE RESULTS** 

Lab ID: L1845807-07

Client ID: SS307

Date Received: 11/08/18 Not Specified Sample Location: WISCASSET, ME Field Prep:

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab	)								
Solids, Total	60.0		%	0.100	NA	1	-	11/10/18 10:39	121,2540G	RI



**Project Name:** Lab Number: MASON STATION

L1845807 Report Date: **Project Number:** 11/16/18 171.06108

**SAMPLE RESULTS** 

Lab ID: Date Collected: L1845807-08 11/05/18 13:00

11/08/18 Client ID: SS308 Date Received:

Not Specified Sample Location: WISCASSET, ME Field Prep:

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab	)								
Solids, Total	71.3		%	0.100	NA	1	-	11/10/18 10:39	121,2540G	RI



Lab Number: L1845807

**Report Date:** 11/16/18

# Sample Receipt and Container Information

Were project specific reporting limits specified?

MASON STATION

**Cooler Information** 

Project Name:

Cooler Custody Seal

A Absent

Project Number: 171.06108

Container Info	rmation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	рН	deg C	Pres	Seal	Date/Time	Analysis(*)
L1845807-01A	Glass 60mL/2oz unpreserved	Α	NA		4.1	Υ	Absent		ME-TS-2540(7),PCB-8082-3540C(14)
L1845807-02A	Glass 60mL/2oz unpreserved	Α	NA		4.1	Υ	Absent		ME-TS-2540(7),PCB-8082-3540C(14)
L1845807-03A	Glass 60mL/2oz unpreserved	Α	NA		4.1	Υ	Absent		ME-TS-2540(7),PCB-8082-3540C(14)
L1845807-04A	Glass 60mL/2oz unpreserved	Α	NA		4.1	Υ	Absent		ME-TS-2540(7),PCB-8082-3540C(14)
L1845807-05A	Glass 60mL/2oz unpreserved	Α	NA		4.1	Υ	Absent		ME-TS-2540(7),PCB-8082-3540C(14)
L1845807-06A	Glass 60mL/2oz unpreserved	Α	NA		4.1	Υ	Absent		ME-TS-2540(7),PCB-8082-3540C(14)
L1845807-07A	Glass 60mL/2oz unpreserved	Α	NA		4.1	Υ	Absent		ME-TS-2540(7),PCB-8082-3540C(14)
L1845807-08A	Glass 60mL/2oz unpreserved	Α	NA		4.1	Υ	Absent		ME-TS-2540(7),PCB-8082-3540C(14)
L1845807-09A	Amber 1000ml unpreserved	Α	6	6	4.1	Υ	Absent		PCB-8082(7)
L1845807-09B	Amber 1000ml unpreserved	Α	6	6	4.1	Υ	Absent		PCB-8082(7)



Project Name: MASON STATION Lab Number: L1845807

**Project Number:** 171.06108 **Report Date:** 11/16/18

#### **GLOSSARY**

#### Acronyms

LCSD

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any

adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis

of PAHs using Solid-Phase Microextraction (SPME).

- Laboratory Control Sample Duplicate: Refer to LCS.

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an

analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case

estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of

analytes or a material containing known and verified amounts of analytes.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of

analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (R1). The MDL includes any

values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

adjustments from unutions, concentrations of moisture content, where applicable

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's

reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL

includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the

precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the

values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the

associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample is toxicity derived by multiplying each dioxin and furan by its corresponding TEF

and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

# Footnotes

- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

#### Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: Data Usability Report



Project Name: MASON STATION Lab Number: L1845807

Project Number: 171.06108 Report Date: 11/16/18

#### Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations
  of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.
- J Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- **ND** Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report



Project Name: MASON STATION Lab Number: L1845807
Project Number: 171.06108 Report Date: 11/16/18

#### REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

# **LIMITATION OF LIABILITIES**

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc. Facility: Company-wide

Revision 12 Published Date: 10/9/2018 4:58:19 PM Department: Quality Assurance Title: Certificate/Approval Program Summary

Page 1 of 1

ID No.:17873

# Certification Information

#### The following analytes are not included in our Primary NELAP Scope of Accreditation:

#### Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: lodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-

Tetramethylbenzene: 4-Ethyltoluene

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

#### **Mansfield Facility** SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

#### The following analytes are included in our Massachusetts DEP Scope of Accreditation

#### Westborough Facility:

#### **Drinking Water**

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE,

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

#### Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate. EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

# **Mansfield Facility:**

#### **Drinking Water**

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

#### Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Pre-Qualtrax Document ID: 08-113 Document Type: Form

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45807-01	SS 301 SS 302	11/5/18 11:25		EPP				X					1
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05	55305	11/5/18 12:45	5 5	EPP				X				120111	1
06	55306 55307 55308	1/5/18/12:55	2	EPP				X					1
99	Equipment Blank	11/5/18 12:30	-	EPP				X					2
Container Type P= Plastic A= Amber glass V= Vial G= Glass B= Bacteria cup C= Cube O= Other E= Encore D= BOD Bottle	Preservative  A= None B= HCl C= HNO <sub>3</sub> D= H <sub>2</sub> SO <sub>4</sub> E= NaOH F= MeOH G= NaHSO <sub>4</sub> H = Na <sub>2</sub> S2 <sub>2</sub> O <sub>3</sub> I= Ascorbic Acid J = NH <sub>4</sub> Cl K= Zn Acetate O= Other	Relinquished By: Rob Mark	Pre	iner Type servative Time 1330 1930	136	May	dd By	A A	7 /3	te/Time :30	Alpha's To	les submitted are subje ferms and Conditions. rse side. 01-01 (rev. 12-Mar-2012)	ect to

# ATTACHMENT B

**Decontamination Protocol** 

Revised Work Plan
Performance-Based Disposal of Polychlorinated Biphenyl Remediation Waste
Exterior Transformer Enclosures
Mason Station Powerhouse
Wiscasset, Maine

# Movable Equipment, Tools, and Sampling Equipment Decontamination Procedures

# Scope:

Any movable equipment, tools, or sampling equipment which becomes contaminated with PCBs during the cleanup will be decontaminated through self-implementing decontamination procedures (§761.79(c)(2)(i). The surfaces of the equipment that have been in contact with PCBs will be swabbed using a solvent.

#### Procedure:

- 1. In accordance with §761.79(e), a decontamination area will be setup so that PCBs will not be released to the environment from the decontamination area.
- 2. Personal protective clothing or equipment will be used to protect participants from dermal contact or inhalation of PCBs or materials containing PCBs.
- 3. Equipment will be wiped free of dirt and debris.
- 4. Using a solvent as appropriate, the equipment will be swabbed as necessary to decontaminate the equipment.
- 5. The decontamination will be documented in writing and using photographs or video recordings and maintained for 3 years following the decontamination procedures.
- 6. Decontamination waste and residues will be disposed of at their existing PCB concentrations in accordance with §761.79(g).
- 7. Non-liquid cleaning materials and personal protective equipment resulting from decontamination will be disposed of in accordance with §761.61(a)(5)(v).